The Regulation of Wind Turbine Development in the Municipality of the District of Digby – Summary of Proposed By-laws

Except for Conway and the Digby Wellfield Area, there is no municipal control over any land use or development including the erection of wind turbines. The Municipality, through its Planning Advisory Committee, has prepared draft by-laws to regulate this type of development. The draft documents will be presented at a number of public meetings to obtain public input.

The following is a synopsis of how wind energy development will be regulated.

Domestic Turbines
A domestic wind turbine is defined as a wind turbine which has a rated capacity of not more than 100kW and which is intended primarily to reduce on-site consumption of utility power. They can be over 30 metres (100 feet) in height but are often smaller, particularly when used for a household or small business.

The proposed by-laws regulate these turbines as follows:

- Separation distance from a residence not located on the property – 1 and 1/2 times the height of the turbine
- Separation distance from a residence located on the property – 1 times height plus 3 metres (9.8 feet)
- Setback from all property lines - 1 times height plus 3 metres (9.8 feet)

The process for obtaining a development permit for domestic turbines is straightforward. If the separation distance and setback can be met a permit is issued.

Utility Scale Turbines
A utility scale wind turbine is defined as a device for converting wind power to produce electricity of at least 100Kw. These turbines are often in excess of 100 to 115 metres (300 to 350 feet) in height.

A development permit for a utility scale turbine may only be issued if Council has entered into a development agreement with the developer. Council must hold a public hearing to obtain public input before Council can enter into an agreement.

The development agreement must be consistent with criteria contained in the by-laws. The criteria in the proposed by-laws are as follows:

Policy 11 In reviewing applications to enter into a Development Agreement for the development of utility scale wind turbines it shall be the policy of Council to have consideration to the following:

(a) the proposed development does not create an unacceptable impact on surrounding residential uses in terms of noise, shadow flicker/strobing and public safety. In the evaluation of this criterion, in addition to the impact study required by Policy 12, Council shall have regard to the following:

    (i) noise level information supplied by the manufacturers of the wind turbines;
    (ii) the latest peer reviewed studies which address acceptable levels of noise on residential uses;
    (iii) the duration of expected noise exposure by adjacent properties;
    (iv) the extent to which shadow flicker and strobing is a factor on residential uses;
    (v) the turbines are located such that collapse, blade throw or ice throw does not affect adjacent properties.

(b) in the opinion of Council the proposed development does not visually dominate the landscape as evidenced by data provided through the visual impact study required by Policy 12.

(c) the intersection of any access road(s) with any public road meets the design and construction specifications of the authority having jurisdiction over public roads.

(d) that support tower, blades and nacelles be painted off-white or light grey and have a matt finish.

(e) that no advertisements or lettering be visible except that of the manufacturer.

(f) the impact of the proposed development on surface water, storm water, streams, lakes or wetlands and other environmental matters.

(g) the impact of the proposed development with respect to soil stability and retention and potential for erosion.

(h) the impact of the proposed development on public water supplies or private wells.

(i) a project decommissioning and site reclamation plan.

The developer will be required to submit all information required to assess the proposal in light of the above criteria. In addition to a visual impact study and noise impact study, decommissioning and reclamation plans must also be submitted.

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